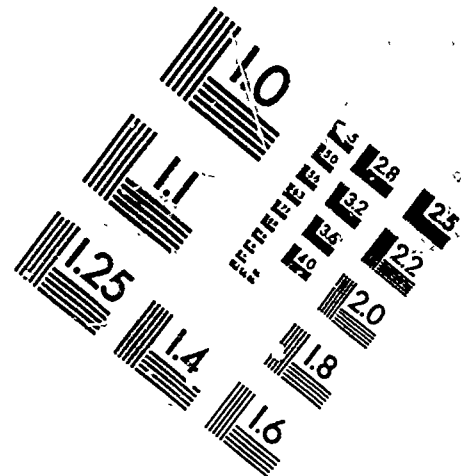
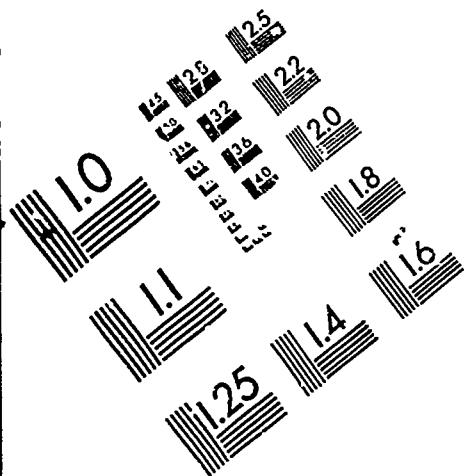




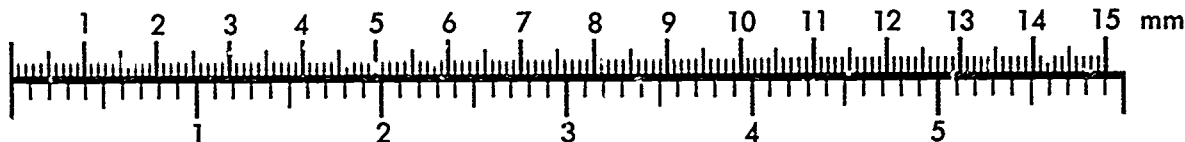
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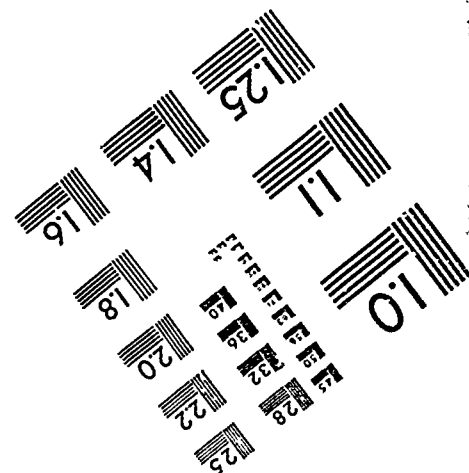
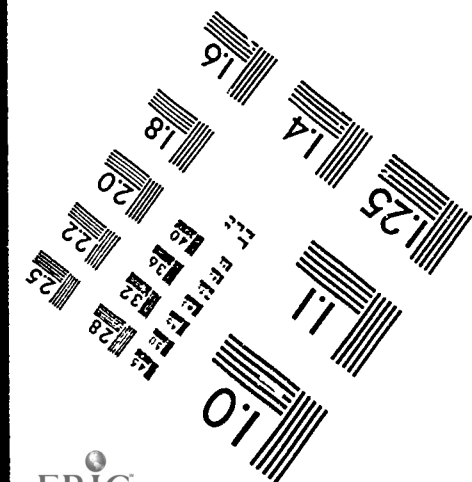
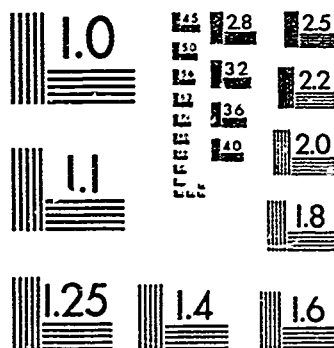
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ABSTRACT

The economic decline of rural America has widespread consequences for families, children, and education. Broad changes in farming and in the rural nonfarm sector have pushed the poverty rate for rural areas in the 1980s higher than the central cities rate. Projections indicate that by the mid-1990s, one-half of all farm families in the midwest may become financially insolvent. Prompted by a decline in economic and living standards, the young and educated leave, schools and service establishments close, and social pathology increases. This study focuses on families under economic pressure in an agriculturally dependent county in Iowa. Relatively affluent before the downturn, these families had much to lose in a troubled economy. The sample includes 76 two-parent families with a seventh-grade child and at least one other sibling. Approximately half of the parents grew up on a farm, but only 12% define themselves as farmers. Four out of five of the families are in the middle class. Based on self-report and observational data, this study examined ways in which families were adapting to scarcity and the psychosocial consequences of such adaptation for couples and their children. Findings indicate: (1) that adverse income change has effects on hardship adaptations that match those of income level and far exceed the influence of unstable work; (2) that hardship adaptations mediated the negative effects of deprivation on emotional health and family relationships; and (3) that father's negativity represents a stronger link between hardship and child behavior than mother's negativity. The document includes data tables, illustrative figures, and 48 references. (ALL)

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Families under Economic Pressure¹

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Abstract

Within a context of increasing material hardship in rural America, this study assesses family responses to this change and their consequences from the perspective of the household economy. It draws upon the findings of largely separate fields of inquiry, including those on income level and loss, unemployment, and hardship adjustments. Using survey and observational data on two-parent families in a midwestern rural county, we find (1) that adverse income change has effects on hardship adaptations that match those of income level and far exceed the influence of unstable work; (2) that hardship adaptations mediate the negative effects of deprivation on emotional health and family relationships; and (3) that father's negativity in the family represents a stronger link between hardship and child behavior than mother's negativity.

Families under Economic Pressure

The economic decline of rural America is having widespread consequences for families and children.² Broad changes in farming and in the rural nonfarm sector have pushed the poverty rate for rural areas in the 1980s above that for central cities. Despite farm subsidies, as many as one-half of all farm families in the midwest may become financially insolvent by the mid-1990s. These changes are transforming rural America and its small communities. Prompted by a decline in economic opportunity and living standards, the young and educated leave, service establishments and schools close, and social pathology increases.

This study focuses on the changing world of families in an agriculturally dependent county of the U.S. midwest. Relatively affluent before the downturn, these families had much to lose in a troubled economy. Using both survey and observational data, we examine some ways in which these families are adapting to scarcity as well as the psychosocial consequences of these changes for couples and their children. The sample includes 76 two-parent families with a seventh-grade child and at least one other sibling. Approximately half of the parents grew up on a farm, but only 12 percent define themselves as farmers. Four out of five of the families are in the middle class.

We view families under economic pressure from the perspective of the family economy, the systematic way families allocate their resources to meet their needs and standards (Hareven, 1982; Modell, 1978; Modell and Hareven, 1973; Schultz, 1974). Agricultural crises can lower farm family income directly through reduced farm prices. Rural decline also affects small town families indirectly through declining sales, unstable work, and lower wages and salaries; a reduction in one resource (e.g., men's earnings) initiates a process of readjustment as families reallocate all resources (e.g., mother's time).

We begin the study by relating the family economy perspective to other research traditions, such as those on poverty and unemployment. Following a description of the sample and basic measurements, the analysis turns to three research foci. First, we explore the

antecedents of family responses to hardship and their variations. By starting with variation in family economics, this study traces out the effects of hardship through family adaptations and relationships. Second, we address the proposition that family response to hardship (specifically, the cutting back strategy) links deprivation to individual distress and family relationships (Barling, forthcoming; Eckenrode and Gore, 1990; Voydanoff and Donnelly, 1988). Third, we focus on the behavior of fathers as a link between hardship and the development of children. This behavior refers to both marriage and the parent-child relationship. Empirical research has little to offer on the cutting back strategies of families, their social and psychological effects, and the key role of fathers in this process among contemporary families (McLoyd, 1989).

The Family Economy in Hard Times

In one of his earliest and most provocative essays on social and individual change, W. I. Thomas (1909) modelled control of desired outcomes as a function of the relation between claims and resources. Although Thomas never applied this formulation to the household economy, it represents a useful way to think about economic pressure--about the financial strain confronting families in the midst of economic hardship.

A growing disparity between income and needs heightens awareness of constraints in making ends meet and of the necessity for making hard choices. Habitual ways of behavior no longer meet expectations; the family begins a process of adjustment designed to bring desires in line with constraints. Families must decide whether to borrow, to cut back on long-planned activities or purchases, or to generate more income by increasing the number of earners (cf. Elder, 1974; Engerman, 1978). Of particular interest in this study is the family strategy of cutting back on consumption. An effective strategy balances income with expenditures for short- and long-term consumption needs, investments, and savings.

A family's response to hardship occurs within the context of multiple economic influences, as represented by four perspectives on family socioeconomics and their relatively independent

research literatures. One views family well-being in terms of income level at a point in time, a perspective that includes most of the research on poverty (e.g., J. T. Patterson, 1981; Townsend, 1979; Wilson, 1987). A second approach views the family from the vantage point of worklife stability or instability, as seen in the unemployment tradition (Dooley and Catalano, 1988; Keyssar, 1986; Warr, 1987). Unstable work, whether through joblessness, underemployment, or demotions, has economic costs, social implications (lack of social ties, structure), and psychological effects. A third approach explores the effect of income change, as experienced by families in the midst of economic swings, dislocations, and ordinary life transitions (Duncan, 1984, 1988; Elder, 1974; Walper, 1988). A fourth perspective takes up budgetary strategies, including responses to hardship through the reduction of expenditures (Modell, 1978; Zimmerman, 1936). Each research tradition has developed independently of the others and no study of the family economy builds upon them as a whole.

Unstable work, from unemployment spells to underemployment and demotion, is one source of income loss, along with divorce and death. However, we begin with unstable work, income loss, and low income as dimensions of economic hardship and then trace their effects through family adaptations to individual distress and social relationships. In theory, all three aspects of family socioeconomic status are antecedent to the felt difficulty in making ends meet (constraints) and actual adjustments, such as cutting back on expenditures and bill paying.

---Figure 1 about here---

Families may lose income from job changes of one kind or another, as well as from declining sales and changes in household membership. Whatever the source, income loss places families in more stringent economic circumstances. The more severe the economic decline, the more accelerated the course of family adaptation. Modest setbacks might be handled effectively with savings, a bank loan, or a loan from parents. A picture of this variation comes from an empirical report based on statewide polls of farm operators in Iowa during the fall of 1984 and the spring of 1985. Bultena, Lasley, and Geller (1986) used the debt-asset ratio as an index of

economic pressure to assign farm operators to four categories. The highest pressure group reported more than twice the number of economic adjustments as the lowest group, and they also scored much higher on emotional distress. Generally, the psychological distress associated with unemployment appears to be largely because of a correlated loss of income (Kessler, Turner, and House 1988).

Neither unstable work nor income loss tells us much about a family's living standards, as indexed by per capita income or the income-to-needs ratio (income adjusted to family size). But income level alone provides an incomplete picture since periods of low income are relatively brief (in relation to chronic poverty), and it is both income change and level that determines material hardship (Bane and Ellwood, 1986; Duncan, 1984, 1988). In this study, income level is specified in part by the middle class position of the sample as a whole.

Felt constraints and economic adjustments represent the two core elements of family adaptations to hardships in our model. Felt constraints refer to a subjective appraisal of economic pressure, as when income fails to cover expenses and the family is unable to make ends meet. Constraints on expenditures are shaped by consumption expectations and behavior, on the one hand, and by level of economic resources, on the other. Accordingly, rising consumption needs from a growing family and declining income would sharply increase pressures to limit expenditures.

Family adjustments refer to actions taken partly in response to such mounting constraints. The actions of particular interest in this research involve losses (of financial independence through indebtedness, sale of possessions) and especially the cutting back of expenditures. To ensure that costs remain well below family income, expenditures might be slashed wherever possible and payments delayed on outstanding bills. For example, medical and dental needs might be shelved for a time while bills remain unpaid.

What are the probable consequences of mounting pressures and economic adjustments that lessen financial independence and consumption? The ultimate objective is to achieve a more

balanced relation between income and outgo, but the short-term experience is one of loss and its hard choices. The necessary cutbacks and losses of family responses to financial hardship tend to increase the risk of depression (Kessler, 1982; Kessler, Turner, and House, 1988). Material deprivation generally increases feelings of psychological distress through the perceived inability to make ends meet (Pearlin, Morton, Lieberman, Menaghan, and Mullan, 1981; Ross and Huber, 1985). Daily life is made harder by the tough decisions to borrow from friends and relatives (and thereby admit financial dependence), to reduce utility and food costs, and to forego medical attention, a much desired vacation, and new clothes. Canceling the family vacation and restricting social activities may balance the budget at the expense of morale.

A second plausible consequence of family responses to economic deprivation involves marital and intergenerational relationships. Shattered relationships are among the more commonly reported family legacies of hard times (Bakke, 1940; Conger, Elder, Lorenz, Conger, Simons, Whitbeck, Huck, and Melby, 1990; Liker and Elder, 1983), reflecting the costs of rising frustrations and explosive emotions among husbands and fathers in particular. In two-parent families, men emerge as a principle link between deprivation and unstable family relationships, owing in large part to their role as the major breadwinner. A panel study of families in the 1930s found that mounting economic pressure increased the abrasive behavior of men, making them more tense, irritable, and explosive (Liker and Elder, 1983). Similar linkages have been reported by contemporary studies (Conger et al., 1990; McLoyd, 1989). Under economic pressure, studies have also found that the negativity of men in marriage carries over to their parent behavior (Elder, Caspi, and van Nguyen, 1986). Under economic pressure, the more hostile men become in the marital relationship, the more they tend to behave punitively and arbitrarily toward their offspring. We test the proposition that the adverse effects of family hardship on children are expressed in large measure through the heightened negativity of men.

In summary, this study examines selected processes that represent potential linkages between economic conditions and family outcomes, behavior, and relationships. A central

mechanism is the process by which families manage to reduce their costs under intense economic pressure, as in the reduction of expenditures. We assume that unstable work, adverse income change, and relatively low income heighten the felt pressure or financial constraints of families and their willingness to reduce expenditures in modest and more drastic ways. These changes, in turn, may increase the level of marital hostility, especially among men, and the likelihood of hostile, punitive behavior in the parent role. Such consequences of financial difficulties correspond with a broad field of social psychological research that demonstrates the negative effect of aversive events on health behavior (Berkowitz, 1989). A second proposed linkage involves the marital negativity of men and its implications for their negative emotions as a parent.

Economic misfortune in any historical context is not a uniform experience among members of the population, and we view this diversity as an important problem. Why some families suffer great losses while others do not warrants investigation. However, this is not the issue we investigate in the present study, though sample selection issues are addressed at points in the analysis. In addition, the adaptation process in Figure 1 pertains mainly to the reduction of expenditures, to cutting back on consumption. Other strategies of household adaptation are at least as important in family survival, such as the option of multiple earners, with emphasis on the work experience of women. We shall keep this experience in mind throughout the analysis, but the multiple earner strategy as a whole is too complex to address within the compass of this article. Finally, the way families respond to economic hardship has implications for their economic well-being over the long run. For example, hostile, angry men could produce an unstable worklife, though our data show no evidence of this (see Table 1). The full story on this circular process awaits panel data.

Method

Sample and Procedures

The sample consists of 76 white, primarily middle-class families from a single county in a midwestern state. They were living in rural areas or in a small city of 12 thousand when

contacted during the spring of 1988. Median family income is \$33,868 for 1987. The husbands averaged 40 years of age, the wives 38 years. The couples most often had one or two years of college education. Twelve percent of the men are farmers and another 40 percent are managers or professionals. All but six of the wives held jobs and 42 percent worked at least 35 hours per week. On average, wives accounted for about one-fifth of total family income. The families were recruited through local school systems as part of a larger study of seventh-graders and their near siblings.

Names for families were obtained from local schools in the county. Eligible families (with seventh-grader, a near sib, and two biological parents) were contacted by telephone and asked to participate. Each family was visited twice in the home. On the first visit, family members completed a set of questionnaires concerning family relations, individual characteristics, and economic circumstances. The second visit focused entirely on the videotaping of family interactions while members engaged in particular tasks (described later). The videotaped interactions provided a basis for judging the quality of behavioral exchange between husband and wife, and parent and child. All videotapes were observed and coded by project staff who had received several weeks of intense training on the rating system.

Self-Report Measures

To place the families in the economic structure of the rural county as of 1987, we use the income-to-needs ratio. This measure adjusts total family income from all sources (wife and husband's earnings, interest, dividends, government payments, etc.) by dividing income by the 1987 poverty guidelines provided by the U. S. Census Bureau. Each family size has a poverty line figure that provides a standard for evaluating whether a given family's income falls below, is just at, or is above the level of basic need among families in the specific category. Mayer and Jencks (1989)

show that an income-to-needs ratio is more predictive of hardship experiences than total family income.

Rural families in the midwest experienced substantial income volatility across the 1980s in response to change in the economy generally, in markets for agricultural goods, and in level of agricultural subsidy. One way to capture this variation is to use measures of both long and short-term change. If we compare total family incomes for 1984 and 1987, we find that two-fifths of the families gained up to ten percent, a figure that does not match the rising cost of living in the region. Using a short-term perspective, half of the Iowa families achieved no real increase between 1986 and 1987.

By drawing upon both measures of income change, the analysis identified families that were under economic pressure over several years, and those that managed to avoid such conditions altogether. For this purpose, we dichotomized both income change distributions and used the dichotomies to identify different groups of families. Well-off families (a score of 1) experienced income gains of at least 20 percent from 1984 to 1987 and at least 12 percent from 1986 to 1987, increases that exceed the rates of inflation for those periods. At the other end on adverse income change we have 17 families that experienced lower gains on both dimensions (a score of 3). As noted above, most of the families had improved their economic position over the long-term (1984-1987) by more than nine percent, though half actually achieved no real economic gain from 1986 to 1987. Between these two groups are 23 families who achieved higher gains on only one of the two dimensions (a score of 2).

Unstable work assumed various forms as the economy faltered during the early 1980s in the rural midwest. Some men and women lost their jobs, others were placed on reduced hours or demoted to a position of lower pay and skill, and still others were bumped into very different lines of work. We sought to index this variation among the principal breadwinners by defining a man's worklife over the past year as unstable if any one of those events had occurred in the past year (unstable = 1, stable = 0). Nineteen of the men reported some evidence of unstable work by

this criterion. Although the time frame of this measure does not match that of adverse income change, we are not concerned with the causal relation between these factors. Both variables are antecedent to family adaptations.

What about the work experience of wives? As noted, all but six of the wives were employed. However, most were employed in part-time jobs that were relatively low paying. Apart from their earnings (which are included in the income-to-needs ratio), we shall assess the effect of women's employment (as number of hours per week) in modifying family responses to hardship and the consequences of these adaptations. Does the adaptational process work the same for families in which women work more or less than half time? The wife's employment may also affect the emotional health of husbands and wives, as well as the quality of their relationship.

According to our theoretical model (Figure 1), the effects of economic deprivation on individual distress (specifically, emotional depression) and family relationships are mediated by the felt constraints and economic adjustments of husband and wife. Constraints and adjustments are the central components of a family's responses to economic hardship and pressures. We refer to these responses as a process of hardship adaptation. The sense that one's options are constrained reflects both economic conditions as an objective fact and expectations regarding a desired or essential standard of living. We used two items from Pearlin et al. (1981) to index this appraisal or recognition: difficulty in paying bills (from 1 = no difficulty to 4 = a great deal of difficulty) and a report on how much money was left over at the end of each month (from 1 = some to 3 = not enough to make ends meet). The reports of husband and wife were averaged to form a single index since they are highly correlated (average $r = .62$).

Economic adjustments refer to specific actions taken by the family over the past year to help make ends meet. Some actions amount to symbolic and material gains, as when the wife enters the labor market and her spouse takes a higher paying job. Other actions carry the meaning of loss. We focused on 17 events that embody the meaning of loss. The loss of financial independence (use of savings, borrowing from friends/relatives, using more credit, arranging for

second mortgage, accepting government assistance, and delaying payments on daily bills, life insurance, mortgage); and the loss of a way of life through consumption and property reductions (selling possessions, postponing major purchases, a vacation, medical care; reducing social activity, charitable contributions, energy consumption, food purchases). An adjustment response to each action is defined by a positive response by either or both spouses. When compared to extremes on adverse income change (high vs. low), we find that each action is more frequently cited by families under economic pressure. For example, the delay of bill payments is reported by 41 percent of the families under a high degree of adverse change, compared to 11 percent of the low pressure families. We summed all item scores (0 or 1) to form an index of economic adjustment with a mean of 6.34.

The last self-report measure concerns the depressed mood of husband and wife. Identical survey forms of the Behavior Symptom Inventory were administered to fathers, mothers, and their seventh-grade child (Derogatis and Melisaratos, 1983). Among the inventory scales, we selected the measure of self-reported depression because it has special relevance to economic hardship and loss. The scale includes six items: thoughts of ending life, feeling lonely, feeling blue, feeling no interest, feeling hopeless, and feelings of worthlessness. The alpha coefficients for father and mother are .83 and .86.

Observations of Family Interaction

Marital relations (hostility, warmth/support), and parental hostility were measured by observational ratings. At the outset, we recognized the many limitations of research that relies solely upon self-report data or a single informant. Depressed individuals, for example, are more likely than the nondepressed to view their environment in a negative light. Thus, if economic pressures increase the risk of depressed feelings among men, this state would color how they view the quality of their marriage, the responsiveness of their wives, and the behavior of their children. Likewise, men who report feeling angry and hostile toward a spouse are likely to describe themselves in the same manner as a parent. In terms of causal modeling, self-reports by the same

person for multiple constructs will generally inflate the parameter estimates (Bank, Dishion, Skinner, and Patterson, 1990). To avoid this problem, we use both self-report and observational measures in the analysis.

Project observers employed a five-point rating scale of hostile behavior to partner by each spouse; observers coded behavior from videotapes of couple interaction in the home. Two hostility ratings for each spouse were scored: one from viewing a 30-minute discussion task involving both partners during which they reviewed the history and present status of their marriage, and the second from viewing a 15-minute marital problem-solving task that involved solving an existing problem in their relationship. Complete definitions for the rating scales can be obtained from the first author. Briefly, a high score for hostility refers to behaviors such as criticism of spouse, angry gestures, or demonstrated contempt for the spouse. The two ratings were made into a composite to create a single scale of hostile behavior for each spouse. The separate rating scales are highly correlated at .60 for fathers and .69 for mothers.

In similar fashion, warm/supportive behavior was rated for both spouses on each task. The warmth and support code includes behaviors such as compliments, praise, helpfulness, attending, and smiling. Again, the two five-point scales were combined to form a single index for each spouse. The correlations between the two ratings are .62 for fathers and .67 for mothers.

In relations with their seventh-grade child, both mother and father were assessed in terms of their expressed hostility on two tasks, one where the parent and child discuss a family activity and one where the discussion centers on a family problem such as doing chores or getting along with a younger brother. The two ratings for the parents are highly correlated (average $r = .60$) and consequently they were averaged. Parent hostility refers to shouting or yelling, heavy use of sarcasm, denigrating the other, sharp and frequent criticism, and angry tones of voice.

The three scales were adapted from a behavioral rating system developed by Hetherington and Clingempeel (1986). Only slight modifications in the codes were made for the study. To estimate the reliability of the observations, approximately a fourth of all videotapes were

randomly selected and independently coded by two observers. The reliability coefficients produced by two observers for marital hostility is .84; for marital warmth/supportiveness, .74; and for parental hostility, .77.

Results

In Table 1 we present the basic correlations, means, and standard deviations for variables in the analysis. As a whole, the pattern of correlations supports the main lines of our analysis: (1) a multifaceted approach to economic conditions in family life; (2) felt economic constraints and adjustments as linkages between hardship conditions and family outcomes, depressive mood and relationships; and (3) the key role of father's behavior in linking socioeconomic pressures to the well-being of children.

---Table 1 about here---

Family income level, adverse income change, unstable work, and hardship adaptations capture different aspects of a family's socioeconomic environment. Adverse income change is correlated with an unfavorable income-to-needs ratio and unstable work, if only on a modest level, and all three conditions markedly increase the likelihood that couples believe they have insufficient income to make ends meet. Judging from the correlation of .70, hard-pressed couples (a high score on felt constraints) act to reduce such pressure by cutting back on expenses and the payment of bills, a process of adapting to family hardship. Simply in terms of these zero-order correlations, an adverse income change and low income matter most for the initiation of hardship adaptations. Unstable work is less consequential, perhaps because its effect is expressed through income change.

By themselves, the three measures of economic hardship have little direct significance for either emotional health or family relationships. The correlation coefficients are relatively weak. But when we arrange all variables in the proposed causal order, the sequence fits the data according to expectations. Income level, adverse income change, and unstable work are correlated

with hardship adaptations (adjustments and constraints), which in turn increase the likelihood of negativity in marital interaction as well as parental hostility. There is little evidence of any connection between economic hardship and observed parent behavior apart from this mediational sequence.

As hypothesized, the linking process centers mainly on the behavior of fathers. Faced with mounting pressures, men become a more negative figure as spouse and parent. This apparent link through men may account for the greater clustering of depressed feelings and hostile responses among men. Depressed men who feel economic pressures are more likely to behave in a hostile manner than are women. Correlations with the attributes of mother are consistently weaker.

Felt constraints and economic adjustments are highly correlated, but they also represent different aspects of coping with reduced resources. Are they indicators of the construct "hardship adaptations?" And which of the economic measures are most predictive of such adaptations? To answer these questions, we set up a measurement model with the income-to-needs ratio, adverse income change, and unstable work as exogenous determinants of felt constraints and adjustments (Jöreskog and Sörbom, 1988). The resulting analysis shows an adequately fitting model in which constraints and adjustments are relatively equal components of hardship adaptations (constraints = .81, adjustments = .86 -- see also Figure 2). Low income and adverse income change have similar effects on adaptations (approx. .38 vs. .18 for unstable work). As a whole, the economic measures account for approximately 40 percent of the variation in hardship adaptations.

--Figure 2 about here--

This model includes women's economic role only through their contribution to total family income, as in the income-to-needs ratio. But the mere fact of their gainful employment could lessen the effect of objective economic pressures and the felt need to cut back on expenditures. One way to explore this possibility is to ask whether the general model, described above, applies to families that vary markedly on the extent of wife employment. Are the parameters similar?

We divided the sample in half on hours worked per week and constrained all parameters to be equal in a multi-group analysis with LISREL (Bollen, 1989:356). Given the structure of the model, we find the parameters to be similar across both high and low employment groups. The general model fits the multi-group data well with a χ^2_7 of 8.75 and a probability greater than .20. We find no support for the theory that the model works differently when women are highly involved in the labor force.

Two other factors pose a more substantial challenge to the generality of the adaptation model, even though the sample is relatively homogenous on both--family stage as indicated by the husband's age and the socioeconomic status of the family. With a seventh-grade child, most of the men were between the ages of 35 and 45 and generally occupied middle-class careers. Both older men and those in professional or managerial jobs had more to lose in income than younger men and those with lower status jobs. Using the multi-group option of LISREL, we constrained all parameters to be equal in two comparisons, men younger than 40 versus older men, and men with professional-managerial jobs versus those with lower status jobs. In both cases, the general model of parameters achieved a good fit to the data. The multi-group test on age groups produced a χ^2_7 of 5.85 with a probability greater than .50. The same test on socioeconomic strata yielded a χ^2_7 value of 9.65 with a probability greater than .20.

There is one aspect of family adaptation that seems especially variable by socioeconomic resources, the type of cut-backs among the hard-pressed and insecure. Marginal families might not have the savings to draw upon to cushion economic misfortune or the luxury of cutting back on nonessential aspects of living, such as a vacation or costly entertainment. Compared to the deprived families of higher status, they should be more confined to paring down the basic essentials of life, from food, car transportation, and household utilities to medical care. A close examination of particular economic adjustments shows a modest difference of this kind by socioeconomic strata.

We first identified two strata in terms of the household head's occupation in 1988: high status defined by professional or managerial employment and lower status, the remainder of the sample. Within each stratum, families that experienced unstable work and/or adverse income change (the high, moderate pressure groups) were defined as economically deprived. In Table 2 we compare these groups on their tendency to use the more common economic adjustments over the prior year, 1987.

--- Table 2 about here ---

Deprived families of higher status were more likely than lower-status families to use savings and borrow from kin and friends. Though generally small, the differences are consistent with what we know about class-linked resources and credit ratings. The higher status families were also more likely to postpone nonessential expenditures on major purchases and vacations. By comparison, the cutback of more essential consumption items is more likely to be found among lower-status families, such as the selling of possessions, the use of a car, and household utilities. Hardpressed families frequently mentioned efforts to cut back on heating costs in the winter.

The direction of percentage differences is generally in line with expectations, but with few exceptions the differences are little more than suggestive. In theory, adaptive options are structured by the resources families bring to deprivational times, and the data underscore the value of taking this perspective in a broader sample of the class structure. Deprived families in this rural Iowa sample were likely to make notable adjustments in their expenditures, and the type of adjustment depended in part on their socioeconomic position and history.

Family Adjustments and Mental Health

Emotional distress is relatively common among couples in hard-pressed families, and especially among husbands. Using LISREL, we tested a model that defined hardship adaptations as a link between economic deprivation (as indexed by low income, adverse income change, and unstable work) and the self-reported emotional depression of men and women.

In theory, one could argue that at least two sets of influences bear upon the similarity of each spouse on emotional states. The first links spouse similarity to the degree to which they are exposed to equally stressful circumstances, both objectively and subjectively. All the evidence at hand points to the preponderance of different circumstances. All the evidence at hand shows a preponderance of different circumstances. The burden of economic trouble falls most heavily on the midwestern husbands in this sample because they are the primary breadwinners. Under these conditions, wife employment might buttress the psychological state of women while reinforcing the depressed mood of hardpressed men.

A second source of influence, the marital relationship itself, also leads to the same conclusion on mood dissimilarity between spouses. In families under stress, emotionally disabled members often elicit compensatory efforts from other family members. Wives in hard-pressed families in the 1930s frequently redoubled efforts to be strong for their demoralized husbands and dependent children (Elder, 1974:Chap. 1). And even older children assumed greater family responsibilities. However, prolonged hardship did, in some cases, produce a generalized state of demoralization within families of the Great Depression. In any case, we find no correlation between the self-reported depression of each spouse in our midwestern sample. In view of this result, we simply allowed the residuals of the two depression scales to be interrelated in estimations of the model. Figure 2 presents only the significant paths from the analysis.

---Figure 2 about here---

The results of this analysis are twofold (Figure 2). First, economic adversity increased the depressive affect of husbands and wives, but only through the loss experience of hardship adaptations. With cross-sectional data, it is prudent to consider other causal sequences or interpretations, though in this instance depressed mood is not a plausible influence on borrowing money or on reducing consumption. Likewise, hardship adaptations are not a reasonable source of unstable work or adverse income change. The second outcome involves the indirect pathway of influence from economic pressure to the affective state of men. According to items in the scale,

the depressed men were more preoccupied with their problems and hurt, hiding the pain from family members as best they could. Compared to other men, they lacked energy and interest in others. They generally minimized social contacts outside the home.

Rosenblatt (1990, pp. 94-95) found all of these symptoms of distress among Minnesota families in the farm crisis. Depressive episodes were common to his farm couples. As one man put it, "there would be some good days, but there would be more bad ones than good ones. Kind of lethargic. Oh, I know it's gotta be done, but I'll do it tomorrow. We kind of floated." Another man who had just lost his farm managed to hide his distress so well that even his wife wondered whether he really cared about the place. "He was so good at covering up, it was hard for me to be compassionate with him," she remarked.

We expected the depressive effects of family hardship to be expressed through the experienced constraints and adjustments of families, and this indirect path represents the only viable link to economic adversity. Neither low income nor adverse income change and unstable work have significant direct effects. This mediational picture undoubtedly reflects the extent to which hardship adaptations capture the profound experience of significant loss. Families that score high on economic adjustments have been exposed to notable losses and their emotional consequences--despair, blame, remorse, worthlessness, even grief in the case of lost possessions.

Is the large differential effect of hardship on husband and wives a partial consequence, at least, of women's roles in hard-pressed families? In addition to family obligations which tend to increase for women under economic pressure, most of the wives carried a part- or full-time job as well. Their earnings are only a small fraction of the total family income, on average 19 percent, but employment may have magnified the differential well-being of each spouse. To assess the effect of women's employment, we set up two ordinary least squares equations, one each for husbands' and wife's depressive affect. Each equation included the three economic measures, a two-item index of hardship adaptations (the constraints and adjustment measures were standardized and then averaged), and the wife's total hours of employment for the prior week.

As expected, the more hours wives spent in the labor force, the lower their risk of emotional depression, but the effect is too small to be reliable ($\beta = -.09$). None of the antecedent factors is statistically significant. By contrast, the employment of wives made a stronger difference for the emotional state of husbands, but in a negative direction. With all other factors controlled, the more wives worked, the greater the risk of emotional depression among husbands ($\beta = .28$, $t = 2.7$). Hardship adaptations were even more predictive of men's depressive affect ($\beta = .46$, $t = -3.6$). Two major family strategies in coping with hardship, cutting back on expenditures and wife employment, are coupled with an emotional price for these midwestern men, at least in the short-term.

The negative emotions associated with loss and deprivation include both depressed feelings and anger or hostility. Indeed, anger turned inward is one element of a depressive syndrome. Instead of relying upon the self-report of anger and interpersonal hostility, we turned to evidence of expressions of marital anger and hostility in video-taped sessions within the home. We were interested in whether the husband and wife in deprived families were hostile toward each other, and whether this hostility carried over to their behavior as parents.

Anger and Hostility in the Family

Angry outbursts and quarrels became more common as economic troubles persisted in families. Children sensed the mounting tension and raw nerves. One girl remarked that at dinner time "we are kinda cautious, like walking on hot ground or something." Some fathers likened themselves to a "bomb ready to explode." Rising economic pressure and economic adjustments do predict more hostility between husband and wife in the midwestern sample, as well as less warmth and emotional support (see Table 1). The link to hard times is especially prominent through men, but they clearly share negative and positive emotions with their wives. The interchange of negativity in marriage tends to follow what Gerald R. Patterson (1983, p. 245) calls an irritability cycle, with aversive behavior tending to elicit aversive reactions. Hostile husbands in the sample were

typically married to hostile wives ($r = .75$). Likewise, warm, supportive behaviors are also generally characteristic of each partner in marriage, a correlation of .60.

Judging from the correlations in Table 1, hardship conditions are not predictive of greater marital hostility, except perhaps through subjective economic pressures and adjustments. Moreover such hostility among men does not appear to be a factor in their unstable work or earning misfortunes. We defined the hostility of each spouse toward the other as a reciprocal outcome of a process linked to economic deprivation through adaptations to hardship. To simplify the visual presentation, Figure 3 includes only the significant paths.

--- Figure 3 about here ---

As measured, economic adversity increased the level of marital hostility through the constraints and adjustments families experienced. And most of this indirect effect is expressed through the behavior of men. Husbands became angry and hostile toward wives in response to greater economic pressure and budgetary reductions. In hard-pressed families, financial woes made men more irritable and explosive. Marital exchanges were marked by sarcasm, outbursts of frustration, and yelling. When one husband noted that their most serious conflicts involved finances, his wife promptly asserted that "we don't have disagreements about money because there hasn't been any to spend!" The husband, by implication, was to blame.

Not all effects of economic deprivation are negative. In fact, the direct effects of low income and adverse income change are actually positive--they diminish the expression of marital hostility, possibly through the counter-influence of mutual support and understanding. Under some conditions, such as interpersonal resources, hard times can bring families closer together. The Lynds (1937) observed this pattern in their study of Middletown families during the 1930s and other studies show corresponding outcomes (Elder, 1979). The benefits of adversity are clearly not the major story in this midwestern sample, but we need more understanding of them in research on family adaptation to change.

Contrary to popular assumptions, marital hostility did not necessarily imply a lack of mutual affection and support. Hostile spouses were not likely to be viewed as warm and supportive (average = $-.35$), but clearly hostility was not always divorced from affection. Indeed, the correlation is so modest that the two ratings cannot serve empirically as measures of the same spouse construct. Nevertheless, a LISREL model like that shown in Figure 3, but with warm-supportive as a marital outcome, produced results that parallel the findings on hostility.

Economic deprivation reduced the warmth of affective relations among couples through rising financial constraints and adjustments. No direct effects are statistically significant. As in the case of hostility, the behavior of men serves as the main link between hardship adaptations and marital relations. The effect of adaptation on men is more than twice the effect on their wives ($-.50$ vs. $-.18$). Neither these results nor findings on marital hostility vary according to the employment history and status of women. The socioeconomic role of men is central to the quality of marital interaction among these midwestern families.

The breakdown of marital civility and social control is one route by which economic deprivation threatens the well-being of children (McLoyd, 1989). This may involve punitive and erratic parenting, a likely result when the marriage becomes a battleground of conflicting interests and emotions. With tempers on edge, the badgering of parents for money to buy things or to go places may lead some fathers to vent frustrations on their children. As one father put it, "They want more money and you don't have it and so you holler at them more."

Divisive marriages are often linked to erratic or punitive parenting (Hinde and Stevenson-Hinde, 1988) and we find such a link in our midwestern families. Men who were hostile to wives were most likely to express similar feelings toward their seventh-grade child ($r = .64$). As suggested by the strength of this correlation and the link between hardship adaptations and husband's hostility toward spouse, this seems to be the only feasible path by which the felt constraints and adjustments of families increased the observed parental hostility of men. However, the actual sequence of influence may not flow from economic pressure through

marriage to parent behavior. For example, a father's negativity as a parent could feed back to the marriage and actually increase negative feelings toward his spouse. A case in point includes women who try to protect their children from the punitive behavior of a depressed, withdrawn father.

In view of these interconnections, we defined men's hostility toward both spouse and child as correlated outcomes of a process of economic deprivation and adaptation. Figure 4 shows the correlation between the residuals of each orientation and provides support for both hardship adaptations and men's hostility toward wife as linkages between economic deprivation and the experience of children. As measured in this study, economic deprivation largely influences the hostility of men toward wives through the loss experience of their economic adjustments. In turn, these adjustments increase the hostility of men as fathers through their hostile sentiments in marriage. Wives do not equal men in transferring the effects of the economic system to the family, but they play critical roles in the recovery of families from misfortune and in the protection of children from abuse (Elder, 1974; Elder, van Nguyen, and Caspi, 1985).

--- Figure 4 about here ---

In tracing the effects of economic deprivation to the hostile sentiments of men, we come to their meaning among children in the study and its behavioral implications. Behavior defined as hostile by an observer may be registered in different ways by boys and girls. The seventh graders in this study were asked how often their fathers acted in certain ways toward them. Negative and supportive behaviors were rated on a five-point scale, ranging from almost always to almost never. Three negative behaviors clustered (got angry at me, shouted or yelled, argued with me) and were averaged to form an index of paternal negativity (1 = low, 5 = high). Two correlated items (is supportive, affectionate) were averaged as well to form an index of paternal emotional support with scores ranging from 1 (low) to 5.

Girls were generally more likely to attribute negative behaviors to hostile fathers than were boys ($r = .63$ vs. $.21$); however, they were less apt than boys to regard these men as not warm

and supportive ($r = -.04$ vs. $-.34$). Similar sex differences on father's behavior under economic stress have been reported in other studies, including a longitudinal study of adolescents in the Great Depression (Elder, van Nguyen, and Caspi, 1985). Young adolescent girls may be at greater risk of paternal abuse for a number of reasons, including their less imposing physical stature relative to that of boys and their household involvement that enhances exposure to an irritable, explosive father. Note that since these reports are based on the child's perceptions of father, the difference in paternal hostility may reflect differences not only in the father's behavior, but also in the interpersonal sensitivity of the child.

Are these differences expressed in the behavior of daughters and sons? A full assessment of this issue exceeds the scope of our research, but we explored it by using adolescent self-reports in a correlational analysis. The adolescents were asked to evaluate a series of items as descriptions of themselves. Two items tapped self-confidence and achievement--"confident, sure of self" and "successful, accomplish what I set out to do." In addition, we included a depression scale from the Behavior Symptom Inventory that is identical in content to the father and mother scales in Figure 2; and an index of aggressive tendencies based on five correlated behavioral statements. The relation of these measures to hardship adaptation (an average of standardized scores on the constraints and adjustments measures) and father's hostility is shown in Table 3.

---Table 3 about here---

According to their self-reports, adolescents from hard-pressed families were at greater risk of psychological impairment than other youth, particularly girls. When exposed to hardship adaptations and the hostility of fathers, adolescents rated themselves lower on self-confidence and on the achievement of goals; they also ranked higher than other youth on depressed feelings and aggressive tendencies. The psychological costs appear to be greater for girls than for boys, except on emotional depression.

Deprived circumstances and paternal hostility increased the risk of emotional depression among sons, but made little difference in this depressive affect among daughters. By contrast,

these girls were at greater risk of a poor self appraisal and a tendency to act out. In view of the usual identification between father and son, one might expect boys exposed to hardship and paternal hostility to look for something to blame in themselves, hence the depressed feeling. The aggressiveness of girls in this situation may also reflect the resentment and combativeness of their mothers under very trying circumstances. The aggressive behavior of adolescents may also have played a role in actually sustaining the negativity of fathers in deprived families.

The impact of adverse family conditions at a point in time offers little insight regarding the social or psychological trajectories of parents and children. The persistence of observed behavior depends in part on whether the situation changes or not. Studies will need to follow these families over time to assess the degree of social continuity and change and its psychosocial consequences. Such studies should also consider the protective factors that enable some children to surmount the limitations of a disadvantaged family and environment (Rutter, 1988).

Conclusions

Economic trends since 1980 include a growing percentage of families with children below the poverty line, owing partly to the growth of mother-only families (Garfinkel and McLanahan, 1986). This trend applies to urban and rural America. Using a multifaceted perspective on economic deprivation and the family economy, this research examined some consequences of this economic adversity for rural families in the U.S. midwest.

Self-report and observational data in the study were obtained from two parents and children in 76 households. Income level and loss, employment instability, and hardship adaptations represent complimentary aspects of a family's economic status. Together they affect the economic pressure experienced by families and the actions they take in reducing expenditures. In theory and empirical results, such pressures and actions link economic deprivation to family behavior.

Three research issues bear upon the analytic model and the task of linking economic hardship, family experience, and individual well-being.

Issue 1. The first issue involves the relative effect of deprivational conditions (income level and change, unstable work) on the hardship adaptations of families. Unstable work is linked to income loss, and thus we find that the level and loss of income are more potent in shaping the felt constraints and adjustments of hardship adaptations. As a package, the three measures of family deprivation account for approximately 40 percent of the variance in hardship adaptations. The model applies to older and younger families, to households in which women are employed for more than 20 hours a week versus those in which they work fewer hours, and to families of higher and lower socioeconomic status.

Issue 2. The second issue concerns the mediational role of socioeconomic adaptations. The dual components of this process--felt constraints and reduced expenditures--symbolize the loss of control over life circumstances and efforts to bring resources in line with expectations. This adaptational process, with its painful effects in the near term and potential benefits over time, links deprivation to the depressed feelings and marital hostility of men and women in American rural families.

Loss experiences typically foster depressed moods and anger, and we find evidence of this relationship. Economic deprivation increased the risk of depressed feelings and spouse hostility among husbands and wives through the strain of hardship adaptations. Among men, this connection is markedly greater. The explanation undoubtedly has much to do with the primary economic role of men, in terms of behavior and cultural expectation. Most of the wives were gainfully employed, and the longer their work week the more it lessened their risk of depression and increased that of their husbands.

The linking role of hardship adaptations has conceptual implications worth noting. First, most studies of socioeconomic conditions tend to look for their direct effects in family life and emotional health, a practice that would have yielded very little in this research. An unfavorable income-to-needs ratio, income change or loss, and unstable work are not significant predictors of depressed feelings or marital negativity. They only influence such outcomes by markedly

increasing the strain of felt economic constraints and the necessity of major adjustments in living conditions.

Consistent with the approach Kohn (1977) has pioneered in studying the effects of social class on families and personality, we should ask why economic deprivation matters for people and families? We answered this question by linking resource scarcity and deprivation to the pressures of increasing financial constraints on expenditures which make downward adjustments in living conditions a necessity. The pressures of felt constraints reflect resource limitations or loss as well as spending expectations.

In an analysis of linkages, we recognize that our sample size, relative to the number of model parameters estimated, makes rejection of hypotheses difficult. The estimated structural coefficients are relatively volatile in samples of this kind. Moreover, our causal linkages are derived from theory and require panel data for a satisfactory assessment. The ultimate assessment must come from efforts to replicate which are underway at present. Nevertheless, the study's results are consistent with a good many studies in the research literature (McLoyd, 1989).

Issue 3. The third issue of the study extends the causal sequence to children in rural families, specifically the seventh graders. The primary figure in the causal sequence is the father, from the effects of hardship adaptations on hostile feelings in marriage to corresponding sentiments toward a son or daughter. Though hardships mainly increased the hostility of men toward family members, this sentiment is diffused throughout family relations.

Among children's perceptions of hostile fathers, boys tended to emphasize a lack of emotional support and understanding, whereas girls were more likely to cite father's negative behavior, as in shouting, cursing, and arguing. Consistent with other research, we find the psychological costs of family hardship and paternal hostility are greater among girls than boys. The data also suggest that a good many adolescents managed to survive both hardship and hostility from parents without psychological harm. Little is known about the protective factors that explain such outcomes.

The full implications of a changing economy for families and their members await longitudinal studies yet to be fully realized. Available data are generally inadequate for studying the processes described in this study. The Panel Study of Income Dynamics (Duncan, 1984), for example, lacks the necessary array of information on psychological and relational outcomes. Future research should explore the processes by which adaptations to hardship reinforce and prolong economic disadvantage. Adaptations to economic hardship represent a potential seedbed of family and individual change.

NOTES

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2. O'Hare (1988) describes a statistical portrait of this decline. Using rich qualitative interviews and observations, Rosenblatt (1990) depicts the human struggle to survive in farm families and its psychological and social costs. Bultena, Lasley, and Geller (1986) provide a broader picture of the economic adjustments of farm families in Iowa. Heffernan and Heffernan (1986) chart a wide range of social, economic, and psychological changes in the farm belt.

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Table 1--Correlation Matrix of Selected Characteristics of Iowa Families

Indicator	1	2	3	4	5	6	7	8	9	10	11	12	13	N	X	SD
Observed parental behavior																
1. Hostile: mother														74	3.43	1.24
2. father	62													74	3.41	1.52
Observed relations to spouse																
3. Hostile: mother	55	48												74	3.09	1.24
4. father	35	63	65											74	2.95	1.28
5. Warm-supportive: mother	-22	-30	-33	-30										74	4.57	1.17
6. father	-14	-31	-24	-37	60									74	4.26	1.26
Self-report health																
7. Depression: mother	9	10	15	21	-19	-21								75	1.34	0.50
8. father	10	23	10	25	0	-21	6							76	1.31	0.48
9. children	12	19	4	15	6	-4	-7	17						74	1.60	0.70
Self-report economics																
10. Financial constraints: parents	-4	20	11	30	-10	-34	16	40	19					76	1.35	0.87
11. Economic adjustments	-15	14	13	30	-12	-31	16	46	23	70				76	6.34	3.86
12. Unfavorable income to needs ratio	-20	-12	-16	-4	-6	-9	23	17	15	39	36			74	2.99	1.40
13. Adverse income change	-5	9	-1	0	-7	-13	9	17	-4	39	43	19		74	1.85	0.77
14. Unstable work	2	15	2	2	5	-7	-13	18	14	24	26	4	29	76	0.33	0.64

Table 2 - Economic Adjustments of Deprived Families by Socioeconomic Status, in Percentages

Economic Adjustments by Family Status ^a and Deprivation			
Economic Adjustments	Higher Status N = 19	Lower Status N = 29	Difference
<u>Using Savings and Borrowing</u>			
Used savings	74	69	+ 5
Used more credit	47	38	+ 9
Borrowed from kin, friends	37	34	+ 3
Curtailed payments	47	38	+ 9
<u>Cutbacks</u>			
Use of car	42	52	-10
Entertainment	68	69	- 1
Food	53	59	- 6
Household utilities	42	59	-17
Charitable contributions	47	48	- 1
Sold possessions	21	31	-10
<u>Postponements</u>			
Major purchases	89	69	+20
Vacations	74	69	+ 5
Medical care	47	55	- 8
Economic Adjustment Scale, \bar{X}	7.4	7.2	

^aHigh status is defined by professional-managerial status of male household head; lower status refers to all other families. In each stratum, deprived refers to families that experienced unstable work and/or adverse income change (a score of 2 or 3).

Table 3 - Adolescent Correlates of Hardship Adaptations and Father's Hostility by Sex

Self-Report Indicators ^a	Adolescent Correlates of Family Adaptations and Father's Hostility			
	Boys N = 42		Girls N = 34	
	Hardship Adaptations r	Father's Hostility r	Hardship Adaptations r	Father's Hostility r
Confident sure of self	-.11	-.26*	-.35**	.21
Successful, accomplishes what sets out to	-.25	-.11	-.26	-.35**
Depression ^b	.35**	.28*	.08	.11
Aggression ^c	.08	.24	.48***	.53***

*** p < .01

** p < .05

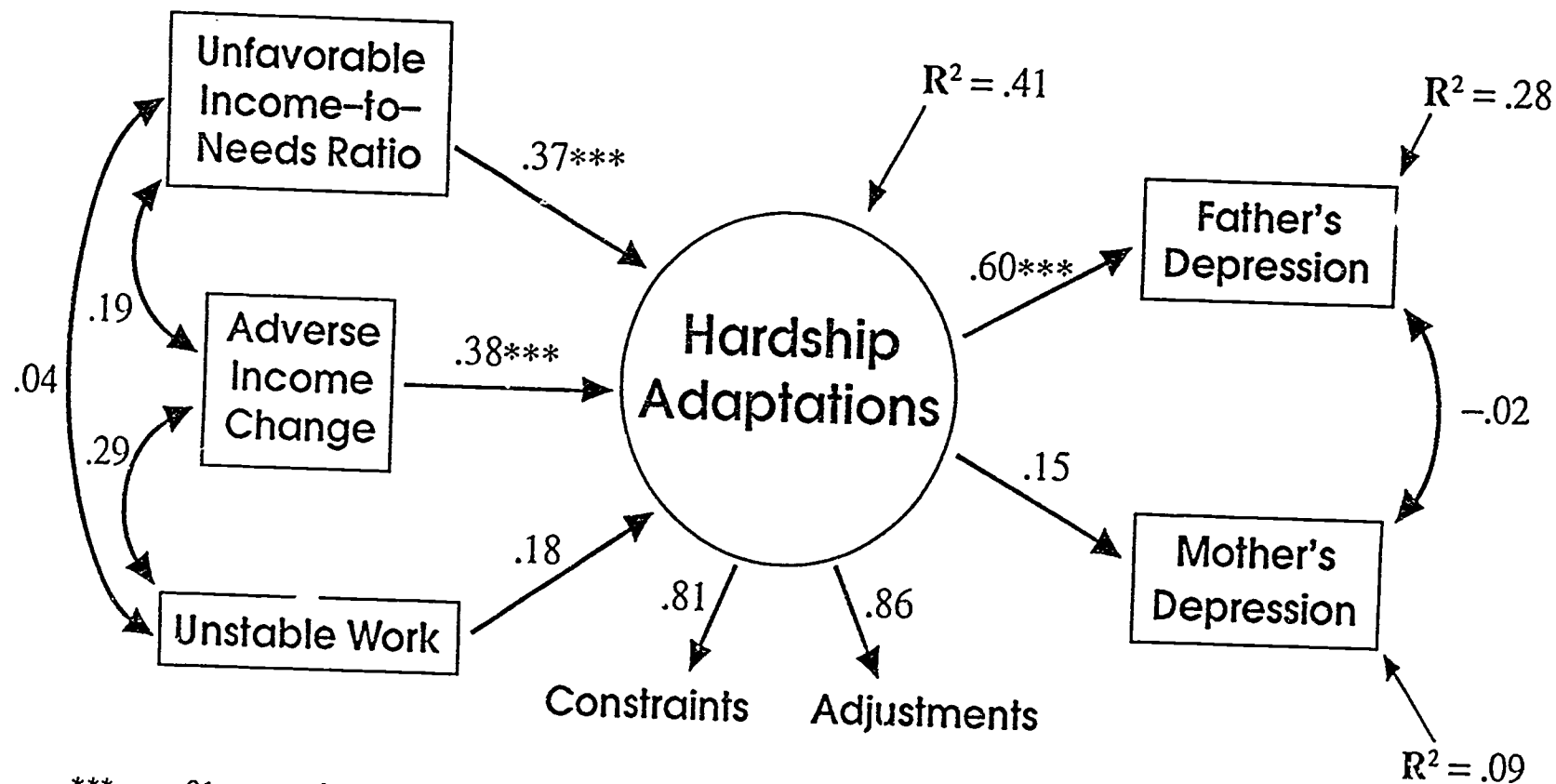
* p < .10

^aThe adolescents were presented a set of behavioral descriptions and were asked to rate how well the particular descriptions fit them--a five-point scale from not at all to quite accurately.

^bDepression (alpha = .83) is indexed by a subscale of the Behavior Symptom Inventory and is identical in content to the father and mother subscales in Figure 2.

^cFive intercorrelated items (1 to 5 range) on the child's questionnaire were averaged to form an index of aggressive behavior--hit back if hit first, do opposite of what bossy person says, tempted to break rule not liked, when mad talk back, and yell back if yelled at. The alpha is .72.

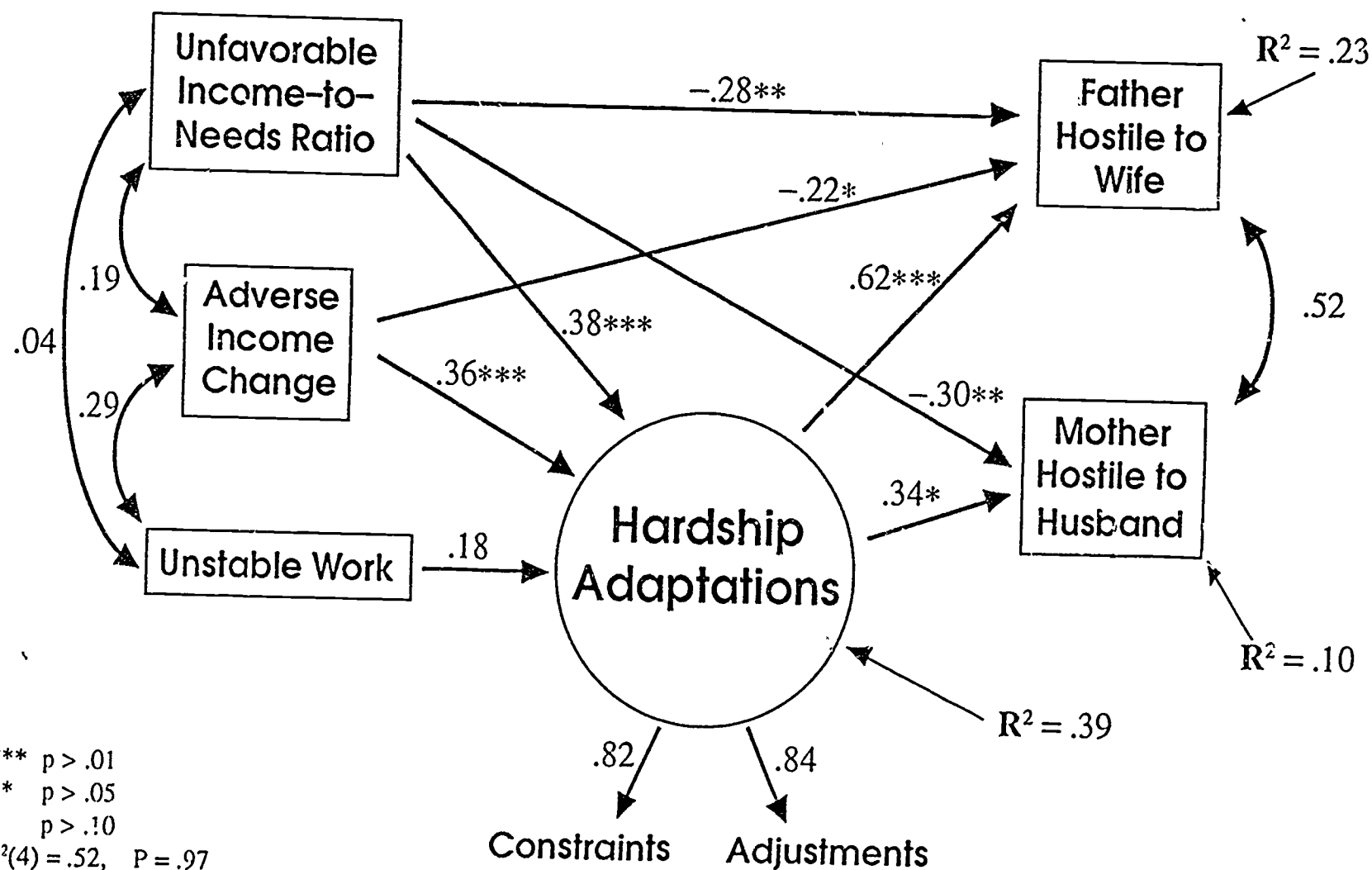
Figure 2. Linking parents' self-reported depression to hardship adaptations and economic conditions^a



*** $p > .01$ $\chi^2(4) = .76, P = .94$
 ** $p > .05$ Goodness of Fit Index = .997
 * $p > .10$

^aNo significant effects of the economic indicators were obtained. Thus we deleted the paths to simplify the diagram.

Figure 3. Linking spouse hostility to hardship adaptations and economic conditions^a



*** $p > .01$

** $p > .05$

* $p > .10$

$\chi^2(4) = .52, P = .97$

Goodness of Fit Index = .998

^aOnly the significant effects of the economic factors on hostility outcomes are shown.